



Billing Code: 3510-13

## DEPARTMENT OF COMMERCE

### National Institute of Standards and Technology

#### Announcement of the American Petroleum Institute's Standards

#### Activities

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice.

SUMMARY: The American Petroleum Institute (API), with the assistance of other interested parties, continues to develop standards in several areas. This notice lists the standardization efforts currently being conducted by API committees. The publication of this notice by the National Institute of Standards and Technology (NIST) on behalf of API is being undertaken as a public service. NIST does not necessarily endorse, approve, or recommend the standards referenced.

DATES: Dates of conferences and meetings are provided in the SUPPLEMENTARY INFORMATION section below.

ADDRESSES: American Petroleum Institute, 1220 L Street, NW,  
Washington, DC 20005; telephone (202) 682-8000, <http://www.api.org>.

FOR FURTHER INFORMATION CONTACT: All contact individuals listed in the  
SUPPLEMENTARY INFORMATION section of this notice may be reached at the  
American Petroleum Institute.

#### SUPPLEMENTARY INFORMATION:

##### Background

The American Petroleum Institute develops and publishes voluntary standards for equipment, materials, operations, and processes for the petroleum and natural gas industry. These standards are used by both private industry and by governmental agencies. All interested persons should contact the appropriate source as listed for further information.

##### Exploration & Production:

Specification 2C, *Offshore Pedestal-mounted Cranes*, 7th Edition

Recommended Practice 2D, *Operation and Maintenance of Offshore Cranes*, 7th Edition

Recommended Practice 2EQ, *Seismic Design Procedures and Criteria for Offshore Structures*, 1st Edition

Recommended Practice 4G, *Operation, Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures*, 4th Edition

Specification 5L, *Specification for Line Pipe*, 45th Edition

Recommended Practice 5L8, *Field Inspection of New Line Pipe*, 3rd Edition

Specification 5L9, *Recommended Practice for External Fusion Bonded Epoxy Coating of Line Pipe*, 2nd Edition

Recommended Practice 5LT, *Recommended Practice for Truck Transportation of Line Pipe*, 1st Edition

Recommended Practice 6DR, *Repair and Remanufacture of Pipeline Valves*, 2nd Edition

Recommended Practice 6HT, *Heat Treatment and Testing of Large Cross Section and Critical Section Components*, 2nd Edition

Recommended Practice 7G-1, *Recommended Practice for Drill Stem Design and Operating Limits*, 1st Edition

Specification 7HU2, *Hammer Unions*, 1st Edition

Specification 7NRV, *Specification on Non-Return Valves*, 2nd Edition

Recommended Practice 8B, *Inspection, Maintenance, Repair, and Remanufacture of Hoisting Equipment*, 8th Edition

Specification 8C, *Drilling and Production Hoisting Equipment (PSL 1 and PSL 2)*, 5th Edition

Specification 11AX, *Specification for Subsurface Sucker Rod Pumps and Fittings*, 13th Edition

Specification 11E, *Specification for Pumping Units*, 19th Edition

Recommended Practice 11BR, *Recommended Practice for the Care and Handling of Sucker Rods*, 10th Edition

Recommended Practice 11G, *Recommended Practice for Installation and Lubrication of Pumping Units*, 5th Edition

Recommended Practice 13B-2, *Recommended Practice for Field Testing Oil-based Drilling Fluids*, 5th Edition

Recommended Practice 13C, *Recommended Practice on Drilling Fluid Processing Systems Evaluation*, 5th Edition

Specification 14A, *Subsurface Safety Valve Equipment*, 12th Edition

Recommended Practice 14FZ, *Recommended Practice for Design, Installation, and Maintenance of Electrical Systems for Fixed and Floating Offshore Petroleum Facilities for Unclassified and Class I, Zone 0, Zone 1 and Zone 2 Locations*, 2nd Edition

Specification 16A, *Specification for Drill-through Equipment*, 4th

Specification 16F, *Specification for Marine Drilling Riser Equipment*, 2nd Edition

Recommended Practice 16Q, *Design, Selection, Operation and Maintenance of Marine Drilling Riser Systems*, 2nd Edition

Specification 16R, *Marine Drilling Riser Couplings*, 2nd Edition

Specification 16RCD, *Drill Through Equipment - Rotating Control Devices*, 2nd Edition

Recommended Practice 17A, *Design and Operation of Subsea Production Systems - General Requirements and Recommendations*, 5th Edition

Specification 17L1, *Specification for Flexible Pipe Ancillary Equipment*, 1st Edition

Recommended Practice 17L2, *Recommended Practice for Flexible Pipe Ancillary Equipment*, 1st Edition

Recommended Practice 17P, *Recommended Practice for Structures and Manifolds of Subsea Production Systems*, 1st Edition

Technical Report 17TR4, *Subsea Equipment Pressure Ratings*, 1st Edition

Technical Report 17TR5, *Avoidance of Blockages in Subsea Production Control and Chemical Injection Systems*, 1st Edition

Technical Report 17TR6, *Attributes of Production Chemicals in Subsea Production Systems*, 1st Edition

Recommended Practice 19B, *Evaluation of Well Perforators - Addendum 1*, 2nd Edition

Specification 20A, *Steel, Stainless Steel, and Nickel Base Alloy Castings for use in the Petroleum and Natural Gas Industry*, 1st Edition

Specification 20B, *Open-die-shaped Forgings for use in the Petroleum and Natural Gas Industry*, 1st Edition

Technical Report PER15K-1, *Protocol for Verification and Validation of HPHT Equipment*,  
1st Edition

Recommended Practice HF1, *Hydraulic Fracturing Operations--Well Construction and Integrity Guidelines*, 2nd Edition

Recommended Practice HF2, *Water Management Associated with Hydraulic Fracturing*, 2nd Edition

Recommended Practice HF3, *Practices for Mitigating Surface Impacts Associated with Hydraulic Fracturing*, 2nd Edition

Publication HF4, *Community Engagement Considerations in Hydraulic Fracturing*, 1st Edition

Recommended Practice 51R, *Environmental Protection for Onshore Oil and Gas Production Operations and Leases*, 2nd Edition

Recommended Practice 12R1, *Recommended Practice for Setting, Maintenance, Inspection, Operation, and Repair of Tanks in Production Service*, 6th Edition

Standard 53, *Blowout Prevention Equipment Systems for Drilling Operations*, 4th Edition

Recommended Practice 65-1, *Cementing Shallow Water Flow Zones in Deep Water Wells*,  
2nd Edition

Recommended Practice 90-2, *Annular Casing Pressure Management for Onshore Wells*, 1st Edition

Recommended Practice 92U, *Underbalanced Drilling Operations*, 2nd Edition

Recommended Practice 96, *Deepwater Well Design Considerations*, 1st Edition

Bulletin 97, *Well Control Interface Document Guidelines*, 1st Edition

For Further Information Contact: Roland Goodman, Standards Department, email:

([goodmanr@api.org](mailto:goodmanr@api.org)).

Meetings/Conferences: The Exploration & Production Standards Conference will be held in Westminster, Colorado, June 11 – 15, 2012. Interested parties may visit the API website at <http://www.api.org/meetings/> for more information regarding participation in these meetings.

Marketing:

Recommended Practice 1626, *Storing and Handling Ethanol and Gasoline-ethanol Blends at Distribution Terminals and Filling Stations—Addendum 1*, 2nd Edition

Recommended Practice 1640, *Light Product Quality Terminal Operations*, 1st Edition

For Further Information Contact: Steve Crimaudo, Standards Department, email:

([crimaudos@api.org](mailto:crimaudos@api.org)).

Petroleum Measurement:

*MPMS Chapter 2.2D, Calibration of Upright Cylindrical Tanks Using the Internal Electro-optical Distance Ranging (EODR) Method (ANSI/API MPMS 2.2D), 2nd Edition*

*MPMS Chapter 2.2G, Calibration of Upright Cylindrical Tanks Using the Optical Reference Line Method Using Electro-optical Distance Ranging Equipment, 1st Edition*

*MPMS Chapter 3.5.1, Standard Practice for Level Measurement of Light Hydrocarbon Liquids Onboard Marine Carriers and Floating Storage by Automatic Tank Gauging, Part 1—Liquefied Natural Gas, 1st Edition*

*MPMS Chapter 3.5.2, Standard Practice for Level Measurement of Light Hydrocarbon Liquids Onboard Marine Carriers and Floating Storage by Automatic Tank Gauging, Part 2—Liquefied Petroleum and Chemical Gases, 1st Edition*

*MPMS Chapter 4.2, Displacement Provers, 4th Edition*

*MPMS Chapter 4.8, Operation of Proving Systems, 2nd Edition*

*MPMS Chapter 7.2, Temperature Determination, Part 2—Portable Electronic Thermometers, 3rd Edition*

*MPMS Chapter 7.4, Temperature Determination, Part 4—Dynamic Temperature Measurement, 2nd Edition*

*MPMS Chapter 8.1.1, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, Part 1—General Practices, 1st Edition*

*MPMS Chapter 8.1.2, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, Part 2—Manual Sampling for Crude Oil, 1st Edition*



*MPMS Chapter 8.1.3, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, Part 3—Manual Sampling for Liquid Petroleum Products, 1st Edition*

*MPMS Chapter 8.2.1, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, Part 1—General Section, 1st Edition*

*MPMS Chapter 8.2.2, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, Part 2—Automatic Sampling for Crude Oil, 1st Edition*

*MPMS Chapter 8.2.3, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, Part 3—Automatic Sampling for Liquid Petroleum Products, 1st Edition*

*MPMS Chapter 9.1, Standard Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method (ASTM D1298), 3rd Edition*

*MPMS Chapter 9.2, Standard Test Method for Density or Relative Density of Light Hydrocarbons by Pressure Hydrometer (ASTM D1657), 3rd Edition*

*MPMS Chapter 9.3, Standard Test Method for Density, Relative Density, and API Gravity of Crude Petroleum and Liquid Petroleum Products by Thermohydrometer Method (ASTM D6822), 3rd Edition*

*MPMS Chapter 9.4, Continuous/On-line Density Measurement and Applications, 1st Edition*

*MPMS Chapter 10.7, Standard Test Method for Water in Crude Oils by Potentiometric Karl Fischer Titration (ASTM D4377), 3rd Edition*

*MPMS Chapter 11.3.4, Gasoline/Ethanol Volume Correction Factors, 1st Edition*

*MPMS Chapter 12.1.1, Calculation of Static Petroleum Quantities, Part 1—Upright Cylindrical Tanks and Marine Vessels, 3rd Edition*

*MPMS Chapter 12.1.2, Calculation of Static Petroleum Quantities, Part 2—Calculation Procedures for Tank Cars, 2nd Edition*

*MPMS Chapter 13.3, Measurement Uncertainty, 1st Edition*

*MPMS Chapter 14.1, Collecting and Handling of Natural Gas Samples for Custody Transfer, 7th Edition*

*MPMS Chapter 14.3.1, Concentric, Square-Edged Orifice Meters, Part 1—General Equations and Uncertainty Guidelines (ANSI/API MPMS 14.3.1) (AGA Report No. 3, Part 1) (GPA 8185, Part 1), 4th Edition*

*MPMS Chapter 14.3.3, Concentric, Square-Edged Orifice Meters, Part 3—Natural Gas Applications (ANSI/API MPMS 14.3.3) (AGA Report No. 3, Part 3) (GPA 8185, Part 3), 4th Edition*

*MPMS Chapter 14.3.4, Concentric, Square-Edged Orifice Meters, Part 4—Background, Development, Implementation Procedures and Subroutine Documentation (AGA Report No. 3, Part 4) (GPA 8185, Part 4)", 4th Edition*

*MPMS Chapter 14.7, Mass Measurement of Natural Gas Liquids, 4th Edition*

*MPMS Chapter 14.9, Measurement of Natural Gas by Coriolis Meter (AGA Report No. 11), 2nd Edition*

*MPMS Chapter 14.10, Measurement of Flow to Flares, 2nd Edition*

MPMS Chapter 14.11, *Thermal Cracked Gas*, 1st Edition

MPMS Chapter 14.12, *Vortex Meters For Gas Flow Measurement*, 1st Edition

MPMS Chapter 17.5, *Guidelines for Cargo Analysis and Reconciliation*, 3rd Edition

MPMS Chapter 17.6, *Guidelines for Determining Fullness of Pipelines Between Vessels and Shore Tanks*, 2nd Edition

MPMS Chapter 17.9, *Vessel Experience Factor (VEF)*, 2nd Edition

MPMS Chapter 17.10.1, *Refrigerated Light Hydrocarbon Fluids—Measurement of Cargoes on Board LNG Carriers*, 1st Edition

MPMS Chapter 19.1, *Evaporative Loss From Fixed-roof Tanks* (Previously Publication 2518), 4th Edition

MPMS Chapter 19.2, *Evaporative Loss From Floating-roof Tanks* (Previously Publications 2517 and 2519), 3rd Edition

MPMS Chapter 19.3, Part H, *Tank Seals and Fittings Certification—Administration* (also supersedes and incorporates the relevant sections of API MPMS Chapter 19.3 Parts F and G), 2nd Edition

MPMS Chapter 19.4, *Evaporative Loss Reference Information and Speciation Methodology*, 3rd Edition

MPMS Chapter 20.1, *Allocation Measurement—Overview*, 2nd Edition

MPMS Chapter 20.2, *Production Allocation Measurement Using Single Phase Devices*, 1st Edition

MPMS Chapter 20.3, *Multiphase Flow Measurement*, 1st Edition

MPMS Chapter 20.4, *Draft Standard for Phase Behavior Application in Upstream Measurement and Allocation*, 1st Edition

MPMS Chapter 20.5, *Recommended Practice for Well Rate Determination*, 1st Edition

MPMS Chapter 20.6, *Recommended Practice for Production Allocation Methodologies and Techniques*, 1st Edition

MPMS Chapter 21.1, *Electronic Gas Measurement*, 2nd Edition

MPMS Chapter 22.2, *Testing Protocols—Differential Pressure Flow Measurement Devices*, 2nd Edition

MPMS Chapter 22.3, *Testing Protocols—Flare Gas Meters*, 1st Edition

MPMS Chapter 22.4, *Testing Protocols—Pressure, Differential Pressure, and Temperature Measuring Devices*, 1st Edition

MPMS Chapter 22.5, *Testing Protocols—Electronic Flow Computer Calculations*, 1st Edition

Technical Report 2572, *Carbon Content, Sampling and Calculation*, 1st Edition

Technical Report 2573, API MPMS Chapter 10, *Sediment and Water Methodology Information Guide*, 1st Edition

For Further Information Contact: Paula Watkins, Standards Department, email:

([watkinsp@api.org](mailto:watkinsp@api.org))

Meetings/Conferences: The Spring Committee on Petroleum Measurement Meeting will be held in Dallas, Texas, March 19 – 23, 2012. The Fall Committee on Petroleum Measurement Meeting will be held in New Orleans, Louisiana, October 22 – 26, 2012. Interested parties may visit the API website at <http://www.api.org/meetings/> for more information regarding participation in these meetings.

Pipeline:

Standard 1104, *Welding of Pipelines and Related Facilities*, 21<sup>st</sup> Ed.

Standard 1160, *Managing System Integrity for Hazardous Liquid Pipelines*, 2<sup>nd</sup> Ed.

Recommended Practice 1161, *Guidance Document for the Qualification of Liquid Pipeline Personnel*, 2<sup>nd</sup> Ed.

For Further Information Contact: Ed Baniak, Standards Department, email:

([baniake@api.org](mailto:baniake@api.org)).

Refining:

Recommended Practice 500, *Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2*, 3rd Edition

Standard, 520-Part 1, *Sizing, Selection, and Installation of Pressure-Relieving Devices in Refineries—Part 1, Sizing and Selection*, 9th Edition

Standard 521, *Guide for Pressure-relieving and Depressuring Systems*, 6th Edition

Recommended Practice 535, *Burners for Fired Heaters in General Refinery Services*, 3rd Edition

Recommended Practice 538, *Industrial Fired Boilers*, 1st Edition

Recommended Practice 551, *Process Measurement Instrumentation*, 2nd Edition

Recommended Practice 552, *Transmission Systems*, 2nd Edition

Recommended Practice 553, *Refinery Valves and Accessories for Control and Safety Instrumented Systems*, 2nd Edition

API 555, *Process Analyzers*, 3rd Edition

Standard 560, *Fired Heaters for General Refinery Services*, 5th Edition

Recommended Practice 573, *Inspection of Fired Boilers and Heaters*, 3rd Edition

Recommended Practice 577, *Welding Processes, Inspection, and Metallurgy*, 2nd Edition

Recommended Practice 583, *Corrosion Under Insulation and Fireproofing*, 1st Edition

Recommended Practice 584, *Integrity Operating Windows*, 1st Edition

Recommended Practice 585, *Pressure Equipment Integrity Incident Investigation*, 1st Edition

Standard 599, *Metal Plug Valves — Flanged, Threaded and Welding Ends*, 7th Edition

Standard 603, *Corrosion-Resistant, Bolted Bonnet Gate Valves--Flanged and Butt-Welding Ends*, 8th Edition

Standard 612, *Petroleum, Petrochemical and Natural Gas Industries—Steam Turbines—Special-Purpose Applications*, 7th Edition

Standard 617, *Axial and Centrifugal Compressors and Expander-compressors for Petroleum, Chemical and Gas Industry Services*, 8th Edition

Standard 618, *Reciprocating Compressors for Petroleum, Chemical and Gas Industry Services*, 6th Edition

Standard 620, *Design and Construction of Large, Welded, Low-Pressure Storage Tanks—Addendum 3*, 11th Edition

Standard 623, *Steel Globe Valves—Flanged and Butt-welding Ends, Bolted Bonnets*, 1st Edition

Standard 624, *Type Testing of Rising Stem Valves Equipped with Flexible Graphite Packing for Fugitive Emissions*, 1st Edition

Standard 625-A1, *Tank Systems for Refrigerated Liquefied Gas Storage—Addendum 1*, 1st Edition

Standard 650, *Welded Tanks for Oil Storage*, 12th Edition

Standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction—Addendum 2*, 4th Edition

Standard 661, *Air-Cooled Heat Exchangers for General Refinery Service*, 7th Edition

Standard 663, *Multiple Hairpin Heat Exchangers*, 1st Edition

Standard 664, *Spiral Plate Heat Exchangers*, 1st Edition

Standard 670, *Machinery Protection Systems*, 5th Edition

Standard 673, *Centrifugal Fans for Petroleum, Chemical and Gas Industry Services*, 3rd Edition

Standard 675, *Positive Displacement Pumps—Controlled Volume*, 3rd Edition

Standard 682, *Pumps—Shaft Sealing Systems for Centrifugal and Rotary Pumps*, 4th Edition

Recommended Practice 684, *Tutorial on the API Standard Paragraphs Covering Rotor Dynamics and Balance (An Introduction to Lateral Critical and Train Torsional Analysis and Rotor Balancing)*, 3rd Edition

Recommended Practice 687, *Rotor Repair*, 2nd Edition

Recommended Practice 688, *Pulsation and Vibration Control in Positive Displacement Machinery Systems for Petroleum, Petrochemical, and Natural Gas Industry Services*, 1st Edition



Recommended Practice 691, *Machinery Risk Based Inspection*, 1st Edition

Standard 692, *Compressor Dry Gas Seals*, 1st Edition

Recommended Practice 751, *Safe Operation of Hydrofluoric Acid Alkylation Units*, 4th Edition

Recommended Practice 756, *Management of Hazards Associated with Location of Process Plant Tents and Fabric Structures*, 1st Edition

Standard 780, *Security Vulnerability Assessment Methodology for the Petroleum and Petrochemical Industries*, 1st Edition

Recommended Practice 932-B, *Design, Materials, Fabrication, Operation, and Inspection Guidelines for Corrosion Control in Hydroprocessing Reactor Effluent Air Cooler (REAC) Systems*, 2nd Edition

Recommended Practice 934-A, *Materials and Fabrication Requirements for 2-1/4/3Cr Alloy Steel Heavy Wall Pressure Vessels for High Temperature, High Pressure Hydrogen Service*, Addendum 2, 2nd Edition

For Further Information Contact: David Soffrin, Standards Department, email: ([soffrind@api.org](mailto:soffrind@api.org)).

Meetings/Conferences: The Spring Refining and Equipment Standards Meeting will be held in Dallas, Texas, April 23 – 27, 2012. The Fall Refining and Equipment Standards Meeting

will be held in Los Angeles, California, November 12 – 16, 2012. Interested parties may visit the API website at <http://www.api.org/meetings/> for more information regarding participation in these meetings.

Safety and Fire Protection:

Recommended Practice 2001, *Fire Protection in Refineries*, 9th Edition

Recommended Practice 2009, *Safe Welding, Cutting and Hot Work Practices in the Petroleum and Petrochemical Industries*, 8th Edition

Recommended Practice 2027, *Ignition Hazards Involved in Abrasive Blasting of Atmospheric Storage Tanks in Hydrocarbon Service*, 4th Edition

Recommended Practice 2030, *Application of Fixed Water Spray Systems for Fire Protection in the Petroleum and Petrochemical Industries*, 4th Edition

Recommended Practice 2207, *Preparing Tank Bottoms for Hot Work*, 7th Edition

Recommended Practice 2218, *Fireproofing Practices in Petroleum and Petrochemical Processing Plants*, 3rd Edition

Recommended Practice 2219, *Safe Operation of Vacuum Trucks in Petroleum Service*, 4th Edition

Recommended Practice 2350, *Overfill Protection for Storage Tanks in Petroleum Facilities*, 4th Edition

For Further Information Contact: David Soffrin, Standards Department, email:  
([soffrind@api.org](mailto:soffrind@api.org)).

For Additional Information on the overall API standards program, Contact: David Miller,  
Standards Department, email: [miller@api.org](mailto:miller@api.org).

Dated: March 2, 2012

Willie E. May  
Associate Director for Laboratory Programs

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